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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,044	09/26/2003	John Hilbert	51251/FLC/F392	8049

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EXAMINER

FEGGINS, KRISTAL J

ART UNIT PAPER NUMBER

2861

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/673,044	HILBERT, JOHN	
	Examiner	Art Unit	
	K. Feggins	2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4 and 6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Betzoid et al. (US 6323474 B1) in view of Yamaguchi (US 6195115 B1).

**Betzoid et al. discloses the following claimed limitations:**

\* regarding claim 1, a direct thermal printer/writing instrument prints on thermographic material (fig 1);

\* a direct thermal print head/writing instrument, 10/ having an array of thermal energy sources/individual lasers/ directly radiantly coupled to a thermal print medium/thermographic material, 5/ (col 4, lines 1-21, fig 1);

\* a thermal print medium drive mechanism/rollers 21, 22/ holding the thermal print medium/thermographic material, 5/ in noncontacting proximity to the direct thermal print head/10/ without a thermal energy modulator interposed between the thermal print medium and the direct thermal print head (fig 1, col 4, lines 1-21);

\* wherein the output power of the thermal energy sources are individually controllable by the controller (col 4, lines 1-15, fig 1)

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\* regarding claim 2, wherein the thermal energy sources are lasers (fig 1, col 4, lines 1-21).

\* regarding claim 6, wherein the thermal energy sources are radiant light device/lasers radiate beams of light/ (fig 1, col 4, lines 1-21).

**Betzoid et al. do not discloses the following claimed limitations:**

\* a controller coupled to the direct thermal print head and the thermal print medium drive mechanism,

**Yamaguchi discloses the following claimed limitations:**

\*further regarding claim 1, a controller/driver circuit, fig 3/ coupled to the direct thermal print head and the thermal print medium drive mechanism (col 4, lines 62-67, col 3, lines 1-5, 13-67, col 4, lines 1-15, figs 3 & 4) for the purpose of controlling the printing of the pixel and the movement of the paper.

It would have been obvious at the time of the invention was made to a person having ordinary skill in the art to utilize a controller coupled to the direct thermal print head and the thermal print medium drive mechanism, taught by Yamaguchi into Betzoid et al. for the purpose of achieving high efficient printing of images.

***Allowable Subject Matter***

3. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

4. Applicant's arguments with respect to claims 1, 2, 4 & 6 have been considered but are moot in view of the new ground(s) of rejection. Please see the above rejection Betzoid et al. in view of Yamaguchi (US 6,195,115 B1); Betzoid et al. in view of Yamaguchi discloses a writing device that utilizes a laser that prints on a thermographic material.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Goto et al. (US 5,909,232) disclose a thermal recording system for preheating a thermosensitive recording medium and method therefor. Nacman et al. (US 6,349,641) disclose a multiple diode imaging system including a multiple channel beam modulation integrated circuit. Shirota et al. (US 6,753,896 B2) disclose a laser drawing apparatus and laser drawing method. Takeuchi (US 6,791,594 B2) disclose a laser imaging apparatus. Rudi (US 6,798,439 B2) disclose a thermal recording by means of a flying spot.

### Communication With the USPTO

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Feggins whose telephone number is 571-272-2254. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patel Vip can be reached on 571-272-2458. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
K. FEGGINS  
PRIMARY EXAMINER